

What is claimed is:

**CLAIMS**

1. A method comprising the steps of:  
receiving a Session Initiation Protocol (SIP) message containing VPN information from  
an initiating application; and  
5 registering the VPN information on a communication network.

2. The method of claim 1, wherein the communication network is a Multi-Protocol Label  
Switching (MPLS) network.

10 3. The method of claim 1, wherein the step of registering uses Multi-Protocol Border  
Gateway Protocol (MP-BGP) to distribute routing information associated with the initiating  
application to the communication network.

15 4. The method of claim 1, wherein the step of registering causes the communication  
network to establish network VPN tunnels.

5. The method of claim 1, further comprising receiving a SIP message from an initiating  
application containing a request for network VPN resources.

20 6. The method of claim 5, wherein the request for network VPN resources comprises  
VPN information including requested bandwidth, duration, and quality of service.

25 7. The method of claim 5, further comprising signaling the request to the communication  
network.

8. The method of claim 7, wherein signaling the request to the communication network  
comprises instructing the communication network to reserve network VPN resources on a  
network VPN tunnel according to the VPN information.

30 9. The method of claim 5, further comprising forwarding a SIP invite message toward a  
destination application.

10. Software for providing network VPN services on demand, comprising:  
program logic configured to register application-VPN-ID information associated with a  
first application on a communication network; and

5 program logic configured to interface with the communication network to obtain network  
VPN resources associated with the application-VPN-ID information upon receipt of a request for  
access to the network VPN resources from the first application.

11. The software of claim 10, further comprising program logic for maintaining a  
10 mapping between the first application and the network VPN resources provided to the first  
application.

12. The software of claim 10, further comprising program logic configured to receive  
session initiation protocol (SIP) signaling from a SIP agent associated with the first application  
15 and to generate SIP signaling directed to a second application.

13. A Service – Virtual Private Network (S-VPN) gateway, comprising:  
a Session Initiation Protocol (SIP) server configured to handle SIP signaling to enable a  
first application to register for network VPN resources using said SIP signaling.

20 14. The S-VPN gateway of claim 13, wherein the SIP server is further configured to  
handle SIP signaling to enable the first application to request access to said network VPN  
services.

25 15. The S-VPN gateway of claim 14, further comprising a media signaling gateway  
configured to interface with at least one network device configured to participate in providing  
said network VPN services.

30 16. The S-VPN gateway of claim 14, further comprising a services module configured to  
provide authentication, authorization, and accounting services on the communication network.

17. The S-VPN gateway of claim 13, further comprising an application-VPN database configured to store information associating applications with network VPN resources on the communication network.